Alternatives to Loops

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Alternatives to Loops

- Technologies
  - Microwave
  - Video

Why Alternatives to Loops?

- Bridge decks
- Construction sites
- Reduced maintenance

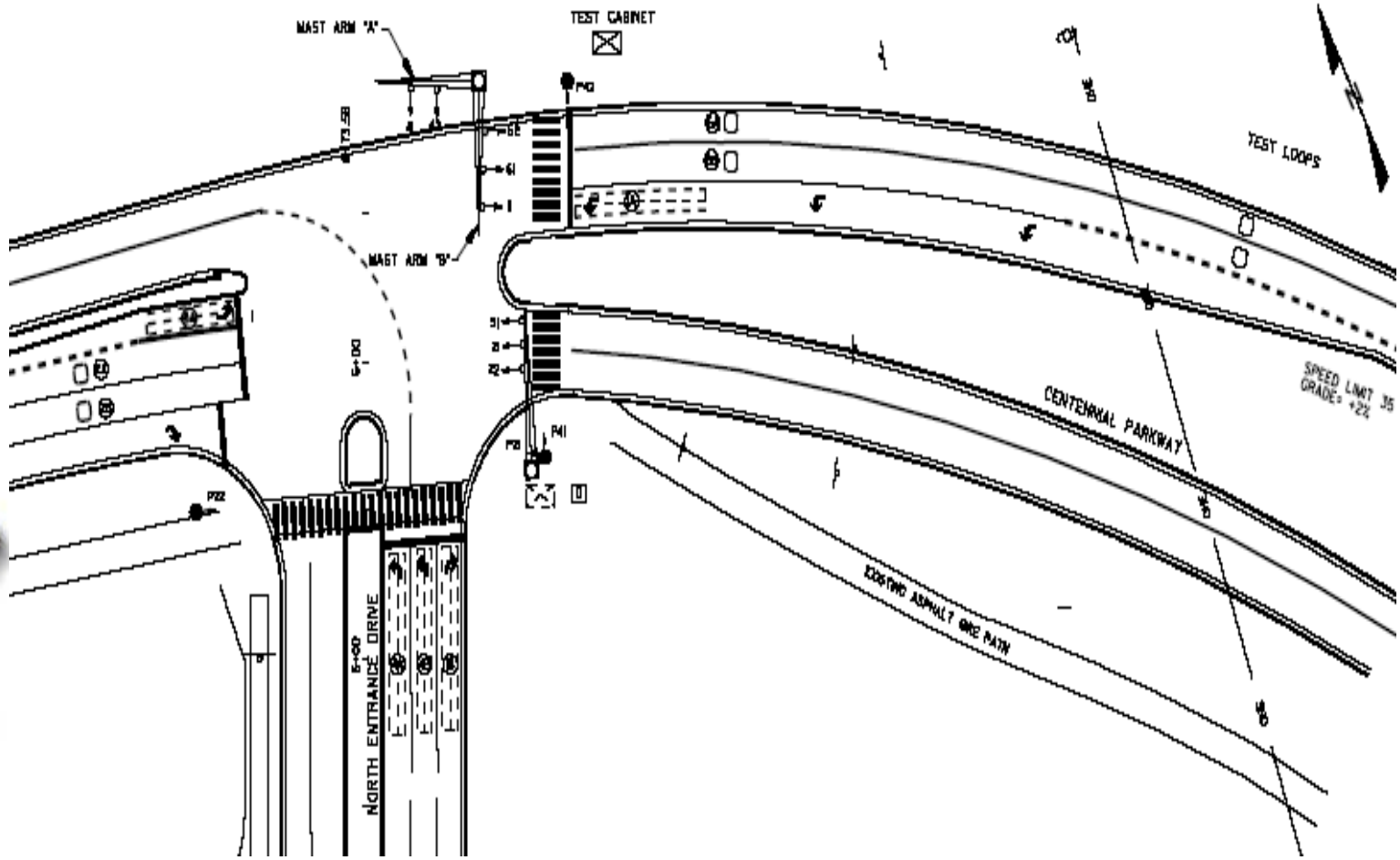
Detection Test Site Work Group

- Purpose
  - Selecting a Test Site Location
  - Construction of Test Site
  - Evaluation of Detection Equipment

Test Site Map

Centennial Parkway & Oval Drive

(Loops Shown)



Test Site

Centennial Parkway & Oval Drive

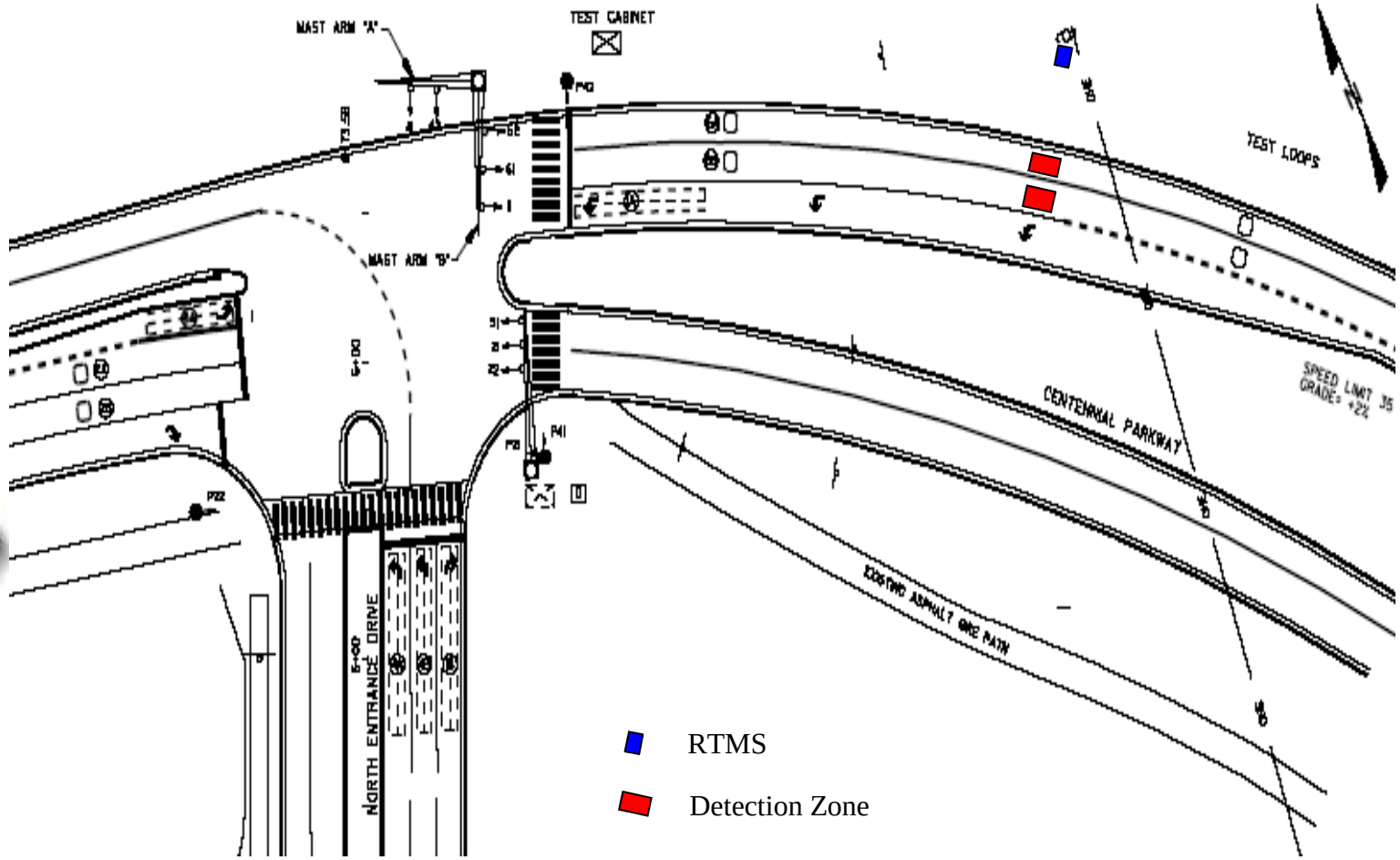
Microwave Detection Equipment
(currently in use)

- Naztec's Accuwave
  - Presence Detection Application
  - Side-fire
  - Cost: ~$2000
- MS SEDCO's TC26-B
  - Pulse Detection Application
  - Side-fire
  - Cost: ~$500

Sensors Tested

- Icoms' TM60
- EIS' RTMS
- Wavetronix' SmartSensor
- Econolite's Solo Pro

EIS' RTMS Map


MAST ARM "A"
TEST CABINET
MAST ARM "B"
TEST LOOPS
CENTENNIAL PARKWAY
SPEED LIMIT 35
GRADE: +2%
NORTH ENTRANCE DRIVE
EXISTING ASPHALT BIKE PATH
RTMS
Detection Zone

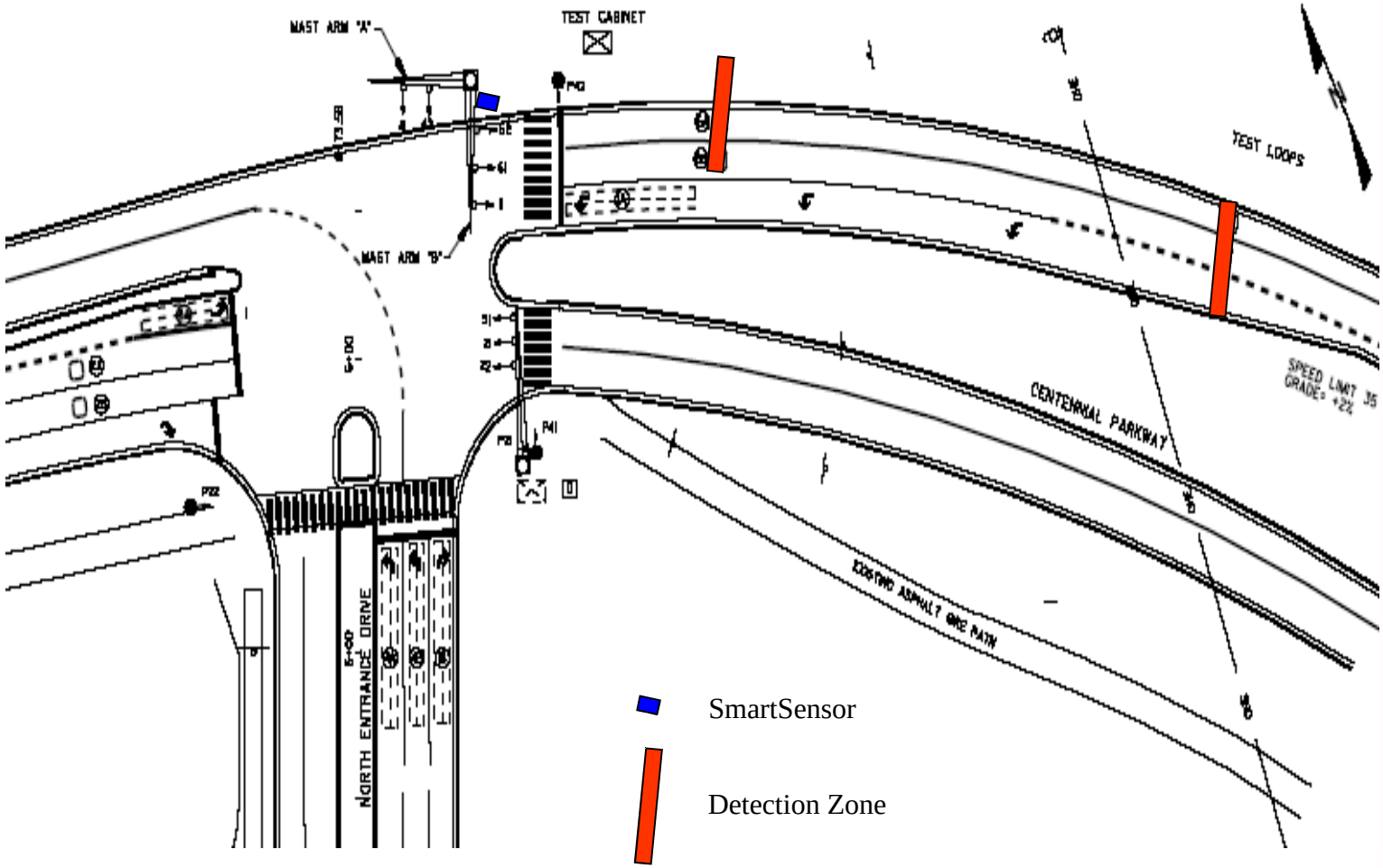
EIS' RTMS

- Microwave detection
- Optimally side-fire mounted
- Up to 8 zones over 200'

EIS' RTMS (cont.)

- Wireless option to cabinet
- Cost: $3500-4000

Wavetronix SmartSensor Map

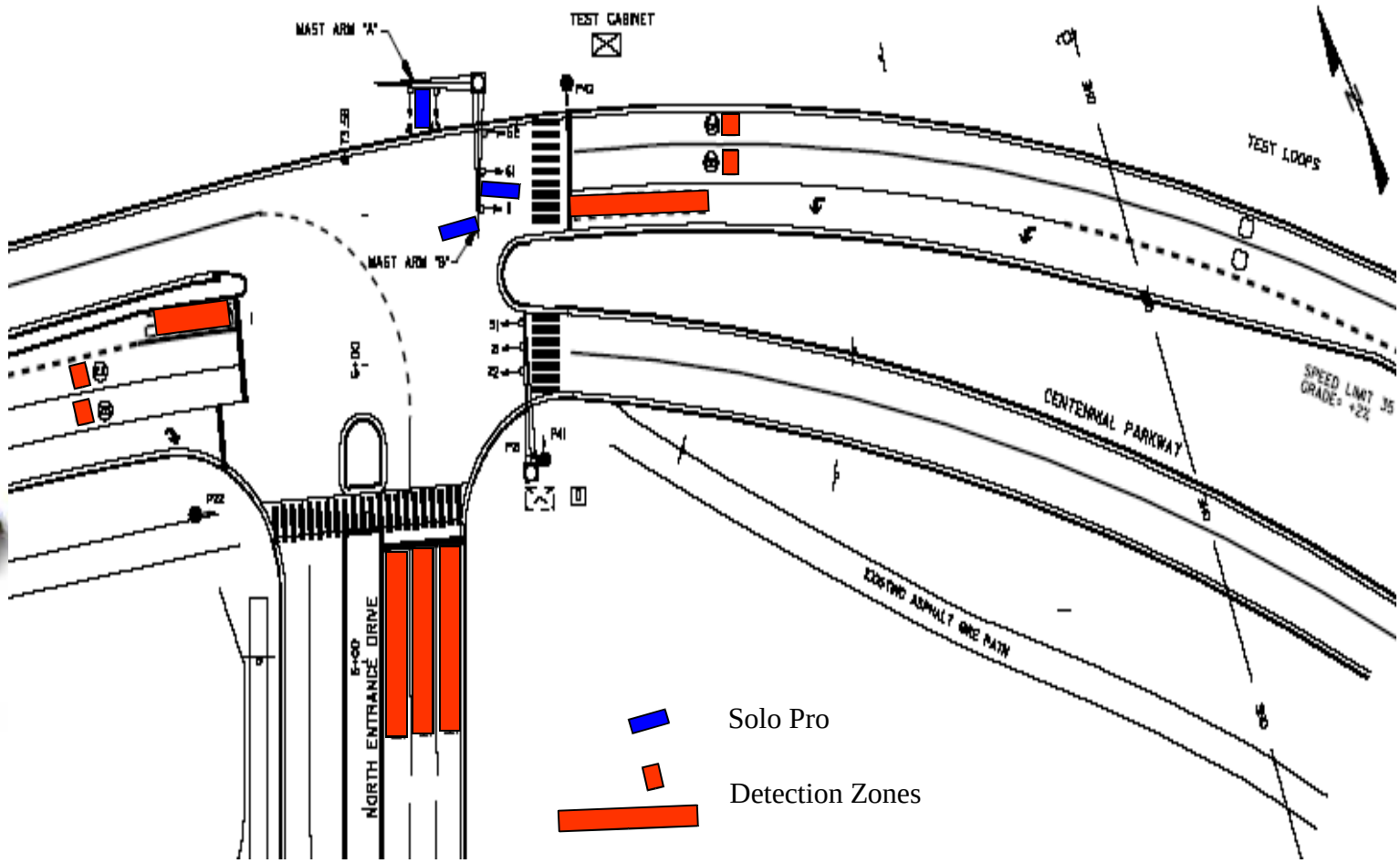


Detection Zone

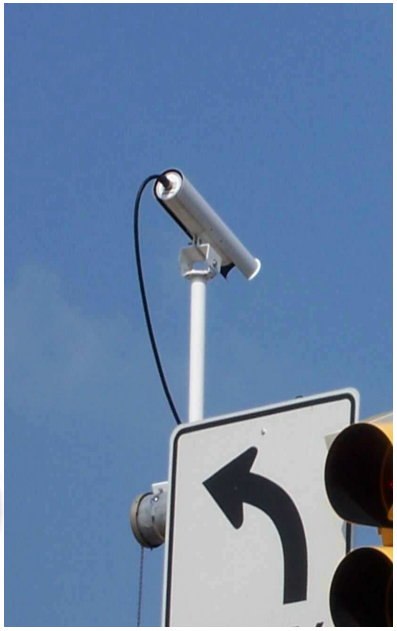
Wavetronix' SmartSensor Advance

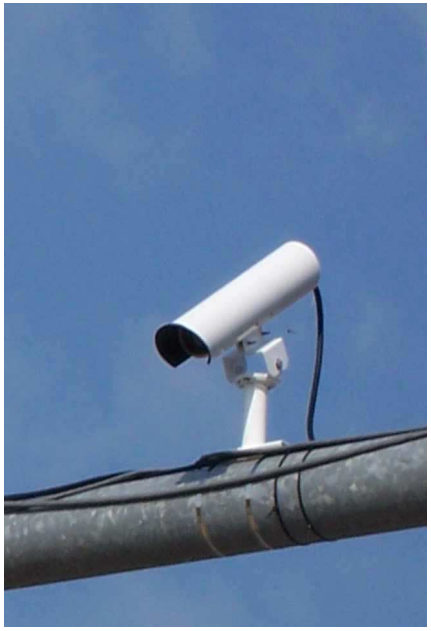
- Microwave detection
- Front-fire mounting
- Up to 8 zones over 500'
- Wireless option to cabinet
- Cost: $4100

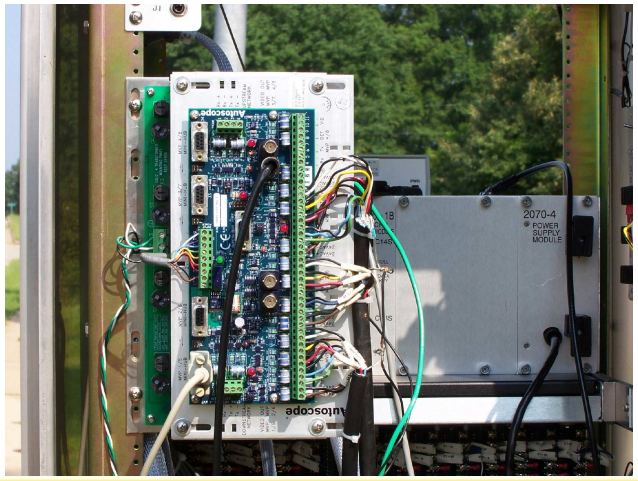
Autoscope's Solo Pro Map



Autoscope's Solo Pro







- Video detection
- Optimally front-fire mounted
- Up to 50 detection zones
- Costs:
  - Camera = $3450
  - ACIP1 = $ 585
  - ACIP4 = $1165

Test Results

- Count Volume Percentages Observed
  (percentages from 6-hour sample time periods)
  - RTMS is 97% - 100%
  - SmartSensor is 100% - 105%
  - Solo Pro (for overhead front-fire mount in only daylight conditions) is 97% - 102%

Thanks and Appreciation!

- Division 5
  - Installing test cabinet
  - Installing and moving sensors at test site
- Paul Marak and John Walden
  - Setting up controller and collecting data
- Vendors
  - Providing sensors and expertise
- Test Site Committee
  - Researching equipment and test site